

FIG. 1

| | | Working Example 1 | Working Example 2 | Working Example 3 | Working Example 4 | Working Example 5 | Working Example 6 | Comparative Example 1 | Comparative Example 2 |
|---------------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------------|-----------------------|
| Properties of evaluated samples | Amount of particles (parts by weight) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | Shape of particles | Needle-like | Needle-like | Needle-like | Needle-like | Needle-like | Needle-like | Spherical | Spherical |
| | Material for particles | Wollastonite | Wollastonite | Wollastonite | Wollastonite | Wollastonite | Wollastonite | Silica | Silica |
| | Particle hardness (Mohs hardness) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | | |
| | Average grain size (μm) | 4 | 8 | 13 | 12 | 20 | 40 | 10 | 10 |
| | Average particle length (μm) | 12 | 40 | 78 | 264 | 360 | 640 | 10 | 10 |
| Evaluation results | Particle content (wt.%) | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| | Coating thickness (μm) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 13 |
| | Ease of coating | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 5 |
| | Ease of cutting Test A | 2 | 3 | 4 | 4 | 4 | 4 | 1 | 3 |
| | Adhesive strength | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 1 |
| | Overall evaluation | Δ (12) | \bigcirc (13) | \odot (14) | \odot (14) | \bigcirc (13) | Δ (12) | \times (11) | \times (9) |
| Parameters | Parameter 1 | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \times | \times |
| | Parameter 2 | \times | \times | \times | \times | \times | \times | \times | \times |
| | Parameter 3 | \times | Δ (lower) | \bigcirc | \bigcirc | Δ (upper) | \times | \times | \times |
| | Parameter 4 | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \times | \times |

2/2

FIG. 2

| Properties of evaluated samples | Working Example 4 | | Working Example 7 | | Working Example 8 | | Working Example 9 | | Working Example 10 | | Working Example 11 | |
|---|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| | Needle-like Wollastonite | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass | Needle-like Glass |
| Amount of particles (parts by weight) | 1.0 | 1.0 | 1.0 | 1.0 | 0.3 | 0.5 | 0.4 | 1.7 | | | | |
| Shape of particles | | | | | | | | | | | | |
| Material for particles | | | | | | | | | | | | |
| Particle hardness (Mohs hardness) | 4.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| Average grain size (μm) | 12 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Average particle length (μm) | 264 | 348 | 348 | 348 | 348 | 348 | 348 | 348 | 348 | 348 | 348 | 348 |
| Particle content (wt.%) | 2.2 | 2.2 | 2.2 | 2.2 | 0.7 | 1.1 | 3.0 | 3.6 | 3.0 | 3.0 | 3.6 | 3.6 |
| Coating thickness (μm) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Ease of coating | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Ease of cutting Test B | 2 | 5 | 5 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Adhesive strength | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Overall evaluation | Δ (12) | \odot (15) | \odot (13) | \odot (14) | \odot (14) | \odot (14) | \odot (14) | \odot (13) | \odot (14) | \odot (13) | \odot (13) | \odot (13) |
| Parameter 1 | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot |
| Parameter 2 | \times | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot |
| Parameter 3 | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot | \odot |
| Parameter 4 | \odot | \odot | \odot | \odot | \times | Δ (lower) | Δ (upper) | \times | Δ (upper) | \times | \times | \times |